

# Gallagher Tract 30" & 24" Sewer Extension Solicitation Number: CO-00609 Job No.: 21-4407

# ADDENDUM 1 November 14, 2022

#### To Bidder of Record:

This addendum, applicable to work referenced above, is an amendment to the bid proposal, plans and specifications and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the bid proposal.

### **RESPONSE TO QUESTIONS**

1. Question: Can the engineer provide flow data for the Bypass on existing 36 in sewer line?

Answer: According to SAWS Utility Service Regulations 11.3.1(6.), "it is the responsibility of the developer customer to monitor and control existing flows during construction to prevent overflows from occurring. Furthermore, per Utility Service Regulations 13.4.4, "Determination of flows for by-pass pumping is the responsibility of the developer customer. If available, SAWS Master Planning Division may provide modeled flowrates upon request, however the use if this information is at the sole risk of the user".

SAWS Master Planning has stated there is no data for this area, but it is estimated that less than 600 homes are currently connected to the existing 36" sewer main.

2. Question: There are 16 – 5ft Tee-Base Manholes on the plans, Bid items call for 15 only?

Answer: There are a total of 17 – 5 ft Tee-Based Manholes. This includes the 15 Standard Tee-Bases, Custom Tie-in Manhole (MH A1A), & the Sweeping Bend Manhole (MH A6). The material is called out as line items 4 through 6 on the bid proposal. Installation of these 17 Manholes is captured under line items 12 through 14. See Clarifications and #1 of Changes to the Specifications.

3. Question: Is the material for the tee-base include the risers and ring and covers?

Answer: A line item (#70) on the bid proposal has been added to capture the material for the Tee-Based Manholes ring & covers. In addition, the overall quantities on sheet 0.1 "General Notes and Quantities" has also been updated to reflect this. See #1 Changes to the Plans.

4. Question: Bid item 17 & 23 appear to be the same, both have annular grout. Please clarify.

Answer: The grout in line item 17 is to cover filling in the annular space between the outside of the steel casing and the bore hole itself. The grout in line item 23 is to cover filling in the annular space between the carrier pipe and the inside of the steel casing.

#### CHANGES TO SPECIFICATIONS

1. Remove the Bid Proposal (BP-1–BP-3) in its entirety and replaced with attached revised version. Bidders shall use the revised Bid Proposal attached to this Addendum when submitting a bid for this project. Failure to use the revised Bid Proposal may result in the bid being found non-responsive.

#### **CHANGES TO PLANS**

- 1. Sheet 0.1 (General Notes and Quantities )-Remove Sheet 0.1 in its entirety and replace with revised version attached to this addendum
- 2. Sheet 6.0 (Tree Preservation Sheet Index)-Remove Sheet 6.0 in its entirety and replace with revised version attached to this addendum
- 3. Sheet 6.1 (Tree Preservation Plan Tables)-Remove Sheet 6.1 in its entirety and replace with revised version attached to this addendum

#### **CLARIFICATIONS**

- 1. The revised bid proposal and sheet 0.1 were updated to include the quantities for ring & covers for the 5' Tee-Base Manholes.
- 2. Sheets 6.0 & 6.1 were updated to include the City of San Antonio approved and stamped tree plans.

### **END OF ADDENDUM 1**

This Addendum, including these 2 pages, is (8) pages with attachments in its entirety.

#### Attachments:

**Revised Bid Proposal** 

Revised sheet 0.1 "General Notes and Quantities"

Revised sheet 6.0 "Tree Preservation Sheet Index"

Revised sheet 6.1 "Tree Preservation Plan Tables"



Gallagher Tract 30" & 24" Sewer Extension Solicitation No. CO-00609 Job No. 21-4407

Yes 🔲

No 🔲

	BID PROPOSAL	
PR	ROPOSAL OF	a corporation
аp	partnership consisting of	
an	n individual doing business as	
Pu as	HE SAN ANTONIO WATER SYSTEM: ursuant to Instructions and Invitation to Bidders, the undersigned proposes to furnish all lab s specified and perform the work required for the project as specified, in accordance wit pecifications for the following prices in the bid proposal to wit:	
PL	LEASE SEE ATTACHED LIST OF BID ITEMS.	
	BIDDER'S SIGNATURE & TITLE	
	FIRM'S NAME (TYPE OR PRINT)	
	FIRM'S ADDRESS	
	FIRM'S PHONE NO. /FAX NO.	
	FIRM'S EMAIL ADDRESS	
Γhe	e Contractor herein acknowledges receipt of the following: Addendum No(s).	
ЭW	VNER RESERVES THE RIGHT TO ACCEPT THE OVERALL MOST RESPONSIBLE BID	Э.
and Prod	e bidder offers to construct the Project in accordance with the Contract Documents for the documents to the complete the Project within 300 calendar days after the start date, as set forth in the occeed. The bidder understands and accepts the provisions of the contract Documuidated damages of the project if not completed on time.	Authorization to
Com	mplete the additional requirements of the Bid Proposal which are included on the following pages.	
Sta	atement on President's Executive Orders	
	s your firm previously performed work subject to the President's Executive Orders Numbers 11246 a ceding similar executive orders (Numbers 10925 and 11114)? Yes No	and 11375 or any
Гех	xas Government Code Chapter 2274 Verifications	
(1)	Are you, Contractor, held or controlled by individuals who are citizens of China, Iran, No or a country designated by the Governor of the State of Texas pursuant to Texas G Chapter 2274? Yes No	
2)	Are you, Contractor, held or controlled by a company or other entity, including a government of controlled by citizens of or directly controlled by the government of China, I Russia or a country designated by the Governor of the State of Texas pursuant to Tecode Chapter 2274? Yes No	ran, North Korea,

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(3) Are you, Contractor, headquartered in China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274?

## SAN ANTONIO WATER SYSTEMS BID PROPOSAL LINE ITEMS SAWS SEWER JOB # 21-4407 SOLICITATION NO. CO-00609

## SUBDIVISION

## NAME: GALLAGHER TRACT 30" & 24" SEWER EXTENSION

LINE NO.	ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	AMOUNT
1	848	24" SDR 26 (10' - 14')	LF	1,217		
2	848	24" SDR 26 (14' - 18')	LF	2,713		
3	857	30" FRP SN 72 MATERIAL ONLY	LS	1	\$1,284,152.00	\$1,284,152.00
4	853	TEE-BASE FIBERGLASS MANHOLE (5' DIA) MATERIAL ONLY	LS	1	\$293,105.00	\$293,105.00
5	853	CUSTOM TEE-BASE FIBERGLASS MANHOLE (5' DIA) MATERIAL ONLY	LS	1	\$28,305.00	\$28,305.00
6	853	SWEEPING BEND WITH TEE-BASE MANHOLE (5' DIA) MATERIAL ONLY	LS	1	\$22,565.00	\$22,565.00
7	857	30" FRP SN 72 (6' - 10') INSTALLATION ONLY	LF	664		
8	857	30" FRP SN 72 (10' - 14') INSTALLATION ONLY	LF	4,217		
9	857	30" FRP SN 72 (14' - 18') INSTALLATION ONLY	LF	1,256		
10	857	30" FRP SN 72 (18' - 22') INSTALLATION ONLY	LF	696		
11	853	FIBERGLASS MANHOLE (4' DIA)	EA	11		
12	853	TEE-BASE FIBERGLASS MANHOLE (5' DIA) INSTALLATION ONLY	EA	15		
13	853	CUSTOM TEE-BASE FIBERGLASS MANHOLE (5' DIA) INSTALLATION ONLY	EA	1		
14	853	SWEEPING BEND WITH TEE-BASE MANHOLE (5' DIA) INSTALLATION ONLY	EA	1		
15	852	MANHOLE RING ENCASEMENT	EA	28		
16	856	42" JACKING, BORING, TUNNELING (WITH GROUT)	LF	165		
17	856	48" JACKING, BORING, TUNNELING (WITH GROUT)	LF	633		
18	856	24" CARRIER PIPE (BORE)	LF	165		
19	856	24" CARRIER PIPE (OPEN CUT)	LF	225		
20	856	30" CARRIER PIPE INSTALLATION ONLY	LF	633		
21	856	42" STEEL CASING (BORE)(GROUT ANNULAR VOID)	LF	165		
22	856	42" STEEL CASING (OPEN CUT)(GROUT ANNULAR SPACE)	LF	225		
23	856	48" STEEL CASING (BORE GROUT ANNULAR SPACE)	LF	633		
24	858	CONCRETE ENCASEMENT	C.Y.	40		
25	550	TRENCH EXCAVATION PROTECTION	LF	10,989		
26	866	TV VIDEO SEWER LINE	LF	11,787		
27	862	REMOVE/REPLACE EXISTING T-BASE MANHOLE (INSTALL NEW TIE-IN)	EA	1		
28	864	BYPASS PUMPING	LS	1		
29	COSA 507	TEMP. 5-STRAND BARB WIRE - INSTALL AND REMOVE	LF	8,686		
30	COSA 507	TEMP. 12' WIDE GATE - INSTALL AND REMOVE	EA	4		
31	COSA 507	TEMP. 16' WIDE GATE - INSTALL AND REMOVE	EA	1		
32	COSA 507	BARB WIRE FENCE - REMOVE AND REPLACE	LF	154		
33	101	TREE PROTECTION/CLEARING	AC	12		
34	520.1	HYDROMULCHING	SY	75,828		
35	COSA 540	ROCK BERM	LF	152		
36	COSA 540	EQUIPMENT STORAGE AREA	SY	1,975		
37	COSA 540	WASHOUT PIT	SY	160		
38	COSA 540.6	CONSTRUCTION ENTRANCE/EXIT	SY	380		
39	COSA 540.9	SILT FENCE	LF	13,468		
40	COSA 200.1	8" FLEX BASE TEMP. DRIVE	SY	2,101		
41	COSA 230.1	EXISTING DRIVE RESTORATION (8" FLEX BASE)	SY	2,603		
42	824	2" WATER SERVICE LINE	LF	1,272		

BP-2 Addendum 1

43	TXDOT 677	REMOVE 4" BROKEN SOLID YELLOW WITH TY II-AA	LF	410	
44	TXDOT 677	REMOVE 4" BROKEN YELLOW STRIPE W TY I-C	LF	610	
45	TXDOT 467	REMOVE DRAINAGE STRUCTURE W/ TY II SET	EA	2	
46	TXDOT 677	REMOVE 4" SOLID WHITE STRIPE	LF	2,041	
47	TXDOT 666	4" BROKEN SOLID YELLOW W/ TY II-AA	LF	410	
48	TXDOT 666	4" BROKEN YELLOW STRIPE W/ TY I-C	LF	610	
49	TXDOT 666	4" SOLID YELLOW STRIPE	LF	2,041	
50	TXDOT 666	4" SOLID WHITE STRIPE	LF	2,040	
51	TXDOT 160	8" TOP SOIL	SY	345	
52	TXDOT 169	SOIL RETENTION BLANKETS (CL1)(TY B)	SY	345	
53	TXDOT 110	EXCAVATION	CY	530	
54	TXDOT 132	EMBANKMENT	CY	237	
55	TXDOT 340	2" ACP TY-C	SY	680	
56	TXDOT 340	3.5" ACP TY-B	SY	566	
57	TXDOT 310	PRIME COAT	GAL.	113	
58	TXDOT 316	ONE COARSE SURFACE TREATMENT	GAL.	57	
59	TXDOT 247	6" FLEX BASE	SY	345	
60	TXDOT 247	12" FLEX BASE	SY	793	
61	TXDOT 260	6" LIME TREATED SUBGRADE	SY	850	
62	TXDOT 464	24" RCP (CLASS III)	LF	93	
63	TXDOT 467	DRAINAGE STRUCTURE W/ TY II SET	EA	2	
64	TXDOT 432	ROCK RUBBLE	SY	745	
65	TXDOT 502	TRAFFIC CONTROL	LS	1	
66	TXDOT 4027	PRIMARY ACCESS ESTABLISHMENT / MAINTENANCE	LS	1	
67	TXDOT 4027	PRIMARY ACCESS RESTORATION	LS	1	
68	TXDOT 4027	SECONDARY ACCESS ESTABLISHMENT / MAINTENANCE	LS	1	
69	TXDOT 4027	SECONDARY ACCESS RESTORATION	LS	1	
70	852	TEE-BASE 5' MANHOLE RING & COVER	EA	17	
SUBTOT	AL (ITEMS	i 1 - 70)			
71	100.1	Mobilization (Max 10% of Line Numbers 1-70)*	LS	1	
72	101.1	Preparing Right-Of-Way (Max 5% of Line Numbers 1-70)*	LS	1	
73	102.1	Intermediate Demobilization and Remobilization	EA	1	

## TOTAL BID PRICE (ITEMS 1 - 73)

\*Mobilization lump sum bid shall be limited to a maximum 10% of the Sub-total Base Bid amount. Preparing Right-of-Way lump sum bid shall be limited to a maximum of 5% of the Sub-total Base Bid amount. The Sub-total Base Bid is defined as all bid items EXCLUDING Item 100.1, Mobilization, and Item 101.1, Preparing Right-Of-Way. In the event of a discrepancy between the written percentage and dollar amount shown for Mobilization and Preparing Right-Of-Way bid items the written percentage will govern. If the percentage written exceeds the allowable maximum stated for Mobilization and or Preparing of Right-Of-Way, SAWS reserves the right to cap the amount at the percentages shown and adjust the extensions of the bid items accordingly."

BP-3 Addendum 1

- 1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE APPROVED BY THE SAN ANTONIO WATER SYSTEM (SAWS) AND COMPLY WITH THE PLANS, SPECIFICATIONS, GENERAL CONDITIONS AND WITH THE FOLLOWING AS APPLICABLE:
- A. CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) "DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEM", TEXAS ADMINISTRATIVE CODE (TAC) TITLE 30 PART 1 CHAPTER 217 AND "PUBLIC DRINKING WATER", TAC TITLE 30 PART 1 CHAPTER 290.
- B. CURRENT TXDOT "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS
- AND DRAINAGE. C. CURRENT "SAN ANTONIO WATER SYSTEM STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER CONSTRUCTION."
- D. CURRENT CITY OF SAN ANTONIO "STANDARD SPECIFICATIONS FOR CONSTRUCTION." E. CURRENT CITY OF SAN ANTONIO "UTILITY EXCAVATION CRITERIA MANUAL" (UECM).
- 2 THE CONTRACTOR SHALL OBTAIN SAWS STANDARD DETAILS FROM SAWS WEBSITE
- HTTPS://APPS.SAWS.ORG/BUSINESS\_CENTER/SPECS/CONSTSPECS/UNLESS OTHERWISE NOTED WITHIN DESIGN PLANS.
- 3. THE CONTRACTOR IS TO NOTIFY AND MAKE ARRANGEMENTS WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 210-233-3500 (DURING REGULAR SAWS WORKING HOURS) AND PROVIDE NOTIFICATION PROCEDURES THE CONTRACTOR WILL USE TO NOTIFY AFFECTED HOME RESIDENTS AND/OR PROPERTY OWNERS TWO (2) WEEKS PRIOR TO EXCAVATION. OUTSIDE OF REGULAR SAWS WORKING HOURS THE SAWS EOC SHOULD BE CONTACTED AT 210-704-7297
- 4. IF NECESSARY, CONTRACTOR WILL COORDINATE USE OF SAWS PREMISES AT NO ADDITIONAL COST TO SAWS, SUCH EFFORTS INCLUDE, BUT ARE NOT LIMITED TO, OBTAINING SECURITY IDENTIFICATION BADGES REQUIRED FOR ACCESS TO SAWS FACILITIES.
- 5. LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND SERVICE LATERALS SHOWN ON THE PLANS ARE UNDERSTOOD TO BE APPROXIMATE. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO SAWS.
- 6. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES PRIOR TO CONSTRUCTION WHETHER SHOWN ON PLANS OR NOT. AS-BUILTS FOR SAWS INFRASTRUCTURE CAN BE OBTAINED AT WEBSITE BELOW. CONTRACTOR SHALL COORDINATE PHYSICAL LOCATES FOR SAWS INFRASTRUCTURE THROUGH THE SAWS INSPECTOR. PLEASE ALLOW UP TO 7 BUSINESS DAYS FOR LOCATES REQUESTING PIPE LOCATION MARKERS ON SAWS INFRASTRUCTURE. THE FOLLOWING CONTACT INFORMATION ARE SUPPLIED FOR VERIFICATION PURPOSES:

SAN ANTONIO WATER SYSTEM: REQUEST AS-BUILTS: <u>HTTPS://WWW.SAWS.ORG/SERVICE/LOCATES-SERVICE/</u> COSA DRAINAGE 210-206-8433 COSA TRAFFIC SIGNAL OPERATIONS 210-207-7720

TEXAS STATEWIDE ONE CALL LOCATOR 1-800-545-6005 OR 811

- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, SIDEWALKS, LANDSCAPING, AND STRUCTURES TO ITS ORIGINAL OR BETTER CONDITION AS A RESULT OF DAMAGES DONE BY THE PROJECT'S CONSTRUCTION.
- 8. CONTRACTOR SHALL NOT MAKE USE OF DUMPSTERS OR WASTE BINS THAT ARE INTENDED TO SERVE RESIDENTS AND/OR BUSINESSES.
- 9. ALL WORK IN TEXAS DEPARTMENT OF TRANSPORTATION AND BEXAR COUNTY RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH RESPECTIVE CONSTRUCTION SPECIFICATIONS AND PERMIT
- 10. THE CONTRACTOR SHALL COMPLY WITH CITY OF SAN ANTONIO OR OTHER GOVERNING MUNICIPALITY'S TREE ORDINANCES WHEN
- 11. ALL WORK WITHIN THE 100-YEAR FLOODPLAIN SHALL BE DONE IN ACCORDANCE WITH FLOODPLAIN DEVELOPMENT PERMIT.
- 12. ANY WORK COMPLETED WITHOUT PRIOR WRITTEN AUTHORIZATION WHICH IS NOT INCLUDED IN THESE PLANS AND SPECIFICATIONS WILL NOT BE COMPENSATED BY THE SAN ANTONIO WATER SYSTEM.
- 13. HOLIDAY WORK: CONTRACTORS WILL NOT BE ALLOWED TO PERFORM SAWS WORK ON SAWS RECOGNIZED HOLIDAYS.
- WEEKEND WORK: CONTRACTORS ARE REQUIRED TO SUBMIT REQUEST TO THE SAWS INSPECTION CONSTRUCTION DEPARTMENT BY 12:00PM ON THE WEDNESDAY PRIOR TO THE WEEKEND BEING REQUESTED. REQUEST SHOULD BE SENT TO CONSTWORKREQ@SAWS.ORG.
- ANY AND ALL SAWS UTILITY WORK INSTALLED WITHOUT WEEKEND APPROVAL WILL BE SUBJECT TO BE UNCOVERED FOR PROPER INSPECTION AT NO COST TO SAWS.
- 14. PRE-CON SITE VIDEO: BEFORE THE START OF ANY CONSTRUCTION. THE SITE MUST BE VIDEO RECORDED BY THE CONTRACTOR WITH ONE COPY SUBMITTED TO SAWS INSPECTIONS. A PRE-SITE VIDEO WILL PROVIDE ACCURATE DOCUMENTATION OF THE EXISTING CONDITIONS
- 15. POWER POLE BRACING: CONTRACTORS SHOULD BE ADVISED THAT THERE ARE EXISTING OVERHEAD UTILITY POLES ALONG THE PROJECT CORRIDOR, CONTRACTORS SHOULD FURTHER BE ADVISED THAT IF THE DISTANCE FROM THE OUTSIDE FACE OF A UTILITY TRENCH TO THE FACE OF A UTILITY POLE IS LESS THAN 5 FEET, SAID UTILITY POLE IS SUBJECT TO BRACING, BASED ON A DETERMINATION MADE BY UTILITY POLE OWNER. COSTS INCURRED BY CONTRACTOR FOR BRACING OF THESE UTILITY POLES IS SUBSIDIARY TO THAT RESPECTIVE UTILITY COMPANY'S WORK. IT IS ADVISABLE FOR THE CONTRACTOR TO REVIEW THE CONSTRUCTION DOCUMENTS AND VISIT THE CONSTRUCTION SITE TO DETERMINE POTENTIAL IMPACTS.
- 16. CONSTRUCTION SEQUENCING: IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO SCHEDULE SEQUENCING FOR REMOVAL AND INSTALLATION OF EXISTING AND PROPOSED SAWS UTILITIES IN CONJUNCTION WITH GENERAL PROJECT CONSTRUCTION. SEQUENCE OF CONSTRUCTION ACTIVITIES SHALL BE CONSIDERED IN ORDER TO MINIMIZE THE EXTENT AND DURATION OF DISTURBANCES.
- 17. CONTRACTOR SHALL COMPLY WITH APPLICABLE REGULATIONS INCLUDING, BUT NOT LIMITED TO, THOSE OVERSEEN BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). OSHA INFORMATION AND RELATED MATERIALS MAY BE OBTAINED AT <u>HTTPS://WWW.OSHA.GOV/</u>OR AT THE OSHA SAN ANTONIO OFFICE LOCATED AT FOUNTAINHEAD TOWER, SUITE 605 8200 W. INTERSTATE 10 SAN ANTONIO, TX 78230 WHICH IS ALSO REACHABLE BY PHONE AT (210) 472-5040.
- 18. TRENCH EXCAVATION SAFETY PROTECTION: CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREAS IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS. PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

- 19. PRIOR TO TIE-INS. ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS INSPECTION AND/OR SAWS PRODUCTION GROUPS AT LEAST TWO WEEKS OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY. SAWS PRODUCTION CONTROL CENTER 210-233-2016
- 20. ASBESTOS CEMENT (AC) PIPE, ALSO KNOWN AS TRANSITE PIPE WHICH IS KNOWN TO CONTAIN ASBESTOS-CONTAINING MATERIAL (ACM), MAYBE LOCATED WITHIN THE PROJECT LIMITS. SPECIAL WASTE MANAGEMENT PROCEDURES AND HEALTH AND SAFETY REQUIREMENTS WILL BE APPLICABLE WHEN REMOVAL AND/OR DISTURBANCE OF THIS PIPE OCCURS, PAYMENT FOR SUCH WORK IS TO BE MADE UNDER ITEM NO. 3000, "HANDLING ASBESTOS CEMENT PIPE".
- AC PIPE REMOVED ON CONSTRUCTION PROJECTS FOR TIE-IN(S) SHOULD BE IN LENGTH OF 26 LINEAR FEET (LF). LENGTHS OF 13 LF SHOULD BE REMOVED WHERE AC PIPE IS BEING REMOVED AND CROSSING PIPES, CONDUITS, OR BOXES.
- 21. VALVE REMOVAL: WHERE THE CONTRACTOR IS TO ABANDON A WATER MAIN, THE CONTROL VALVE LOCATED ON THE ABANDONING BRANCH WILL BE REMOVED AND REPLACED WITH A CAP/PLUG. (NSPI)
- 22. DIVISION VALVES: DIVISION VALVES SHOWN ON PLANS OR NOT SHOWN ON PLANS BUT FOUND IN THE FIELD SHALL ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTION STAFF AND ONLY WITH PRIOR WRITTEN APPROVAL OF THE SAWS DIRECTOR OF PRODUCTION AND OPERATIONS AND PROPER COORDINATION WITH ALL SAWS DEPARTMENTS. CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE INSPECTOR A MINIMUM OF TWO WEEKS IN ADVANCE TO START THE COORDINATION PROCESS AND WILL BE INFORMED BY THE INSPECTOR WHEN THE DIVISION VALVE WILL BE OPERATED BY THE SAWS DISTRIBUTION AND COLLECTION STAFF. THE DIVISION VALVE CAN ONLY BE OPERATED BY SAWS DISTRIBUTION AND COLLECTION STAFF MEMBER NOT THE INSPECTOR OR THE CONTRACTOR. OPERATION OF A DIVISION VALVE WITHOUT THE EXPRESS PRIOR WRITTEN APPROVAL OF THE SAWS DISTRIBUTION AND COLLECTION STAFF WILL CONSTITUTE A MATERIAL BREACH OF ANY WRITTEN SAWS CONTRACT OR PERMIT IN ADDITION TO SUBJECTING THE CONTRACTOR TO LIABILITY FOR ANY AND ALL FINES, FEES, OR OTHER DAMAGES. DIRECT OR CONSEQUENTIAL, THAT MAY ARISE FROM OR BE CAUSED BY THE OPERATION OF THE VALVE WITHOUT PRIOR WRITTEN PERMISSION. PLEASE BE INFORMED THAT THE APPROVAL OF THE OPERATION OR OPENING OR CLOSING OF A DIVISION VALVE CAN TAKE SEVERAL WEEKS FOR APPROVAL. DIVISION VALVES WILL ALSO HAVE A VALVE LID LABELED DIVISION VALVE AND A LOCKING MECHANISM INSTALLED WITH A KEY. THE LOCK AND KEY MECHANISM WILL BE PAID FOR BY THE CONTRACTOR BUT WILL BE INSTALLED BY SAWS DISTRIBUTION AND COLLECTION STAFF.

- 23. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO SANITARY SEWER OVERFLOW (SSO) OCCURS AS A RESULT OF THEIR WORK. ALL CONTRACTOR PERSONNEL RESPONSIBLE FOR SSO PREVENTION AND CONTROL SHALL BE TRAINED ON PROPER RESPONSE. SHOULD AN SSO OCCUR, THE CONTRACTOR SHALL:
- A. IDENTIFY THE SOURCE OF THE SSO AND NOTIFY SAWS EMERGENCY OPERATIONS CENTER (EOC) IMMEDIATELY AT 210-704-SAWS (210-704-7297). PROVIDE THE ADDRESS OF THE SPILL AND AN ESTIMATED VOLUME OR FLOW.
- B. ATTEMPT TO ELIMINATE THE SOURCE OF THE SSO. C. CONTAIN SEWAGE FROM THE SSO TO THE EXTENT OF PREVENTING A POSSIBLE CONTAMINATION OF WATERWAYS.
- D.CLEAN UP SPILL SITE (RETURN CONTAINED SEWAGE TO THE COLLECTION SYSTEM IF POSSIBLE) AND PROPERLY DISPOSE OF CONTAMINATED SOIL/MATERIALS. E. CLEAN THE AFFECTED SEWER MAINS AND REMOVE ANY DEBRIS.
- F. MEET ALL POST-SSO REQUIREMENTS AS PER THE EPA CONSENT DECREE, INCLUDING LINE CLEANING AND TELEVISING THE AFFECTED SEWER MAINS (AT SAWS DIRECTION) WITHIN 24 HOURS.
- SHOULD THE CONTRACTOR FAIL TO ADDRESS AN SSO IMMEDIATELY AND TO SAWS SATISFACTION, THEY WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY SAWS, INCLUDING ANY FINES FROM EPA.
- NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR THIS WORK. ALL WORK SHALL BE DONE ACCORDING TO GUIDELINES SET BY THE TCEQ AND SAWS.
- 24.THE CONTRACTOR SHALL PROVIDE BYPASS PUMPING OF SEWAGE AROUND EACH SEGMENT OF PIPE TO BE REPLACED, IN ACCORDANCE WITH SAWS STANDARD SPECIFICATION ITEM NO. 865, "BYPASS PUMPING SMALL DIAMETER SANITARY SEWER MAINS" AND STANDARD SPECIFICATION ITEM NO. 864, "BYPASS PUMPING LARGE DIAMETER SANITARY SEWER MAINS" AS APPLICABLE. PAYMENT FOR SUCH WORK WILL BE MADE UNDER THE APPROPRIATE BID ITEM ASSOCIATED WITH SANITARY SEWER BYPASS PUMPING IN ACCORDANCE WITH SAWS STANDARD SPECIFICATIONS 865 AND 864.
- 25. PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING FORCE MAINS OF ANY SIZE MUST BE COORDINATED WITH THE SAWS CONSTRUCTION INSPECTION DIVISION AT 210-233-3500 AND/OR SAWS PRODUCTION GROUPS AT LEAST TWO WEEKS OR MORE IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO SAWS OR THE PROJECT AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
- 26. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ALLOWANCES AND ADJUSTMENTS FOR TOP OF MANHOLES TO MATCH THE FINISHED GRADE OF THE PROJECT'S IMPROVEMENTS (NSPI).
- 27. MANHOLE REMOVAL: WHERE EXISTING MANHOLES ARE TO BE REPLACED BY THE CONTRACTOR, THE EXISTING MANHOLES SHALL BE REMOVED. (NSPI)
- 28. SMART MANHOLE COVERS: THE CONTRACTOR SHALL NOTIFY SAWS EOC AT 210-704- SAWS (210-233-7297) AND EITHER AMERICA ESPINOZA AT 210-233-2934 OR JOSE A. MARTINEZ AT 210-233-3071 A MINIMUM OF 72 HOURS, NOT COUNTING WEEKENDS OR SAWS HOLIDAYS, BEFORE WORKING ON THE PIPE OR MANHOLE, IN ORDER TO HAVE SAWS REMOVE THE SMART COVER. ANY DAMAGE DONE TO THE SMART COVER WILL BE CHARGED TO THE CONTRACTOR THROUGH A CHANGE ORDER.
- 29.FLOW METERS IN MANHOLES: THE CONTRACTOR SHALL NOTIFY BOBBY JOHNSON AT 210- 233-3493 OR ABEL BORUNDA AT 210-233-3704 A MINIMUM OF 72 HOURS. NOT COUNTING WEEKENDS OR SAWS HOLIDAYS. BEFORE WORKING ON THE PIPE OR MANHOLE. IN ORDER TO HAVE SAWS REMOVE THE FLOW METER IN THE MANHOLE. ANY DAMAGE DONE TO THE FLOW METER WILL BE CHARGED TO THE CONTRACTOR THROUGH A CHANGE ORDER.

# **ADDITIONAL NOTES:**

- 1. CONTRACTOR AND SUBS SHALL NOT USE LOUIS AGUSTA (PRIVATE DRIVE) FOR CONSTRUCTION ACCESS FOR THE DURATION OF THE PROJECT.
- 2. PHASING OF THE PROJECT REQUIRED PROJECT MAY NOT BE CONSTRUCTED CONTINUOUSLY. NO CONSTRUCTION WILL BE ALLOWED ON THE BOEHME-LEE TRACT DURING HUNTING SEASON (NOVEMBER 1, 2022 - JANUARY 6, 2023) AND THE TEMPORARY CONSTRUCTION EASEMENT WILL EXPIRE ON OCTOBER 31, 2023. CONTRACTOR SHALL ADHERE TO THESE RESTRICTIONS DURING CONSTRUCTION OF THIS PROJECT AND BID COSTS SHALL INCLUDE NESCESSARY MEANS TO COMPLETE THE PROJECT ON SCHEDULE.
- 3. SEWER PIPE WHERE WATER LINE CROSSES SHALL BE MEET THE REQUIREMENTS OF ASTM D2241. CONTRACTOR SHALL CENTER A 20 FOOT JOINT OF 160 P.S.I. PRESSURE RATED P.V.C. AT THE PROPOSED WATER CROSSING (NO SEPARATE PAY ITEM). REFERENCE SANITARY SEWER GENERAL NOTES, S.A.W.S. CRITERIA FOR SEWER MAIN CONSTRUCTION IN THE VICINITY OF WATER MAINS. SEE THIS SHEET FOR TYPICAL SANITARY SEWER / WATER CROSSING DETAIL.
- 4. SEE SHEET 2.0 FOR BENCHMARK INFORMATION.
- 5. 24" PIPES SHALL BE SDR 26. 30" PIPES SHALL BE SN 72.
- 6. WHERE EXCAVATION IS WITHIN 5' OF A UTILITY POLE, THE POLE SHALL BE BRACED. CONTRACTOR TO COORDINATE POWER POLE BRACING (IF NECESSARY) WITH CPS ENERGY. POLE BRACING WILL BE CONSIDERED TO BE INCLUDED WITH THE COST OF THE PROJECT (NSPI).
- 7. DIMENSIONS SHOWN ON PLANS BETWEEN SEWER LINE AND POWER POLE SHOULD BE VERIFIED BY CONTRACTOR. MORE POLES MAY NEED TO BE BRACED BASED ON ACTUAL FIELD DIMENSIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY LOCATIONS OF POWER POLES IN RELATION TO THE PROPOSED SEWER LINE AND ADD BRACING WHERE REQUIRED (NSPI).
- 8. LOUIS AGUSTA IS A PRIVATE DRIVE FOR ADJACENT LANDOWNERS. IT SHOULD NOT BE USED FOR CONSTRUCTION ACCESS TO THIS PROJECT. LANDOWNERS HAVE NOT GIVEN APPROVAL TO USE LOUIS AGUSTA.
- CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO KEEP LIVESTOCK SAFE AND INJURY FREE. REFER TO SPECIFICATION S100.
- 10. ALL TESTING WILL BE SUBSIDIARY TO THE LINE ITEM TO WHICH IT PERTAINS.
- 11. ALL PIPE CONCRETE ENCASEMENT SHALL BE CLASS B, 2500 PSI AND ALL TEE-BASE MANHOLE CONCRETE ENCASEMENT SHALL BE CLASS A,
- 12. ALL SURVEY WORK AND CONSTRUCTION STAKING SHALL BE PERFORMED UNDER THE SUPERVISION OF REGISTERED PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF TEXAS.
- 13. CONTRACTOR TO PROVIDE TESTING AS DICTATED IN THE SAWS SPECIFICATION ITEM NO. 849 "SANITARY SEWER TESTING" AT NO SEPARATE
- 14. CONTRACTOR TO ANTICIPATE USING 2 CREWS ONSITE AS NEEDED TO INSURE THE SCOPE OF THE PROJECT ON THE BOEHME-LEE PROPERTY IS COMPLETED PRIOR TO THE EXPIRATION OF THE TEMPORARY CONSTRUCTION EASEMENT. THE TEMPORARY CONSTRUCTION EASEMENT ON THE BOEHME-LEE PROPERTY EXPIRES ON OCTOBER 31, 2023.
- 15. CONTRACTOR TO REVEGETATE DISTURBED AREAS AS INDICATED IN PLANS WITH A NATIVE SEED MIX. CONTRACTOR SHALL CONFIRM THAT SEED MIX USED IS LIVESTOCK FRIENDLY AND WILL NOT BE HARMFUL IF INGESTED. IF NATIVE MIX CAN NOT BE INDENTIFIED CONTRACTOR MAY USE THE MOST SIMILAR MIX LISTED IN THE RECOMMENDED GRASSES AND GROUNDCOVER CAN BE FOUND IN APPENDIX E "SAN ANTONIO RECOMMENDED PLANT LIST - ALL SUITED TO XERISCAPE PLANTING METHODS" FOUND IN THE CURRENT CITY OF SAN ANTONIO UNIFIED DEVELOPMENT CODE. JOHNSON GRASS, GIANT RAGWEED AND OTHER INVASIVE SPECIES SHALL NOT BE ALLOWED.
- 16. CONTRACTOR MAY REQUEST WALKING THE ALIGNMENT DURING THE BIDDING PROCESS WITH THE ENGINEER WITH ONE WEEKS ADVANCE NOTICE. CONTACT BOBBY TORRES, P.E. (BTORRES@KFWENGINEERS.COM).

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR AND/OR THE TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY

# THE EXISTING UTILITIES SHOWN ARE BASED ON THE BEST RECORDS AVAILABLE AT THE TIME OF DESIGN AND ARE NOT GUARANTEED TO BE

COMPLETE OR ACCURATE. CONTRACTOR TO FIELD VERIFY THE LOCATION (BOTH HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION.

# CONTRACTOR TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL BY BEXAR COUNTY PRIOR TO CONSTRUCTION. ALL ITEMS

NECESSARY SHALL BE IMPLEMENTED PER TMUTCD AND ALL COSTS CAPTURED IN THE TRAFFIC CONTROL BID ITEM. COORDINATION WITH BEXAR COUNTY IS EXPECTED FOR THE DURATION OF THE PROJECT.

# CONCURRENT CONSTRUCTION COORDINATION NOTE: CONTRACTOR TO COORDINATE WITH CONTRACTOR OF CONCURRENT 16" WATER LINE PROJECT (SAWS JOB #22-1001) ON TIMING AND PHASING FOR THE INSTALLATION OF THE SEWER MAIN BETWEEN SEWER LINE STA. 75+00 & 85+00.

PLACED WITHIN THE LIMITS OF EXISTING FLOODPLAIN.

WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

FLOODPLAIN PERMIT NOTE: NO CONSTRUCTION AND/OR WASTE MATERIAL SHALL BE PLACED IN EXISTING LOWS THAT WILL BLOCK OR ALTER FLOW LIMITS OF EXISTING NATURAL DRAINAGE OR

CAUTION!!:
THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE
TO WATER SEWER TELEPHONE AND UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES, ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE

ALL MANHOLES MUST BE WATERTIGHT, WITH WATERTIGHT RINGS AND COVERS. 

ITEM NO.	DESCRIPTION	UNIT	QTY
848	24" SDR 26 (10' - 14')	LF	121
848	24" SDR 26 (14' - 18')	LF	2713
857	30" FRP SN 72 MATERIAL ONLY	LS	1
853	TEE-BASE FIBERGLASS MANHOLE (5' DIA) MATERIAL ONLY	LS	1
853	CUSTOM TEE-BASE FIBERGLASS MANHOLE (5' DIA) MATERIAL ONLY	LS	1
853	SWEEPING BEND WITH TEE-BASE MANHOLE (5' DIA) MATERIAL ONLY	LS	1
857	30" FRP SN 72 (6' - 10') INSTALLATION ONLY	LF	664
857	30" FRP SN 72 (10' - 14') INSTALLATION ONLY	LF	421
857	30" FRP SN 72 (14' - 18') INSTALLATION ONLY 30" FRP SN 72 (18' - 22') INSTALLATION ONLY	LF LF	125
857 853	FIBERGLASS MANHOLE (4' DIA)	EA	696 11
853	TEE-BASE FIBERGLASS MANHOLE (5' DIA) INSTALLATION ONLY	EA	15
853	CUSTOM TEE-BASE FIBERGLASS MANHOLE (5' DIA) INSTALLATION ONLY	EA	1
853	SWEEPING BEND WITH TEE-BASE MANHOLE (5' DIA) INSTALLATION ONLY	EA	1
852	MANHOLE RING ENCASEMENT	EA	28
856	42" JACKING, BORING, TUNNELING (WITH GROUT)	LF	165
856	48" JACKING, BORING, TUNNELING (WITH GROUT)	LF	633
856	24" CARRIER PIPE (BORE)	LF	165
856	24" CARRIER PIPE (OPEN CUT)	LF	225
856	30" CARRIER PIPE INSTALLATION ONLY	LF	633
856	42" STEEL CASING (BORE)(GROUT ANNULAR VOID)	LF	165
856	42" STEEL CASING (OPEN CUT)(GROUT ANNULAR SPACE)	LF	225
856	48" STEEL CASING (BORE GROUT ANNULAR SPACE)	LF	633
858	CONCRETE ENCASEMENT	C.Y.	40
550	TRENCH EXCAVATION PROTECTION	LF	1098
866	TV VIDEO SEWER LINE	LF	1178
862	REMOVE/REPLACE EXISTING T-BASE MANHOLE (INSTALL NEW TIE-IN)	EA	1
864	BYPASS PUMPING	LS	1
COSA 507	TEMP. 5-STRAND BARB WIRE - INSTALL AND REMOVE	LF	868
COSA 507	TEMP. 12' WIDE GATE - INSTALL AND REMOVE	EA	4
COSA 507	TEMP. 16' WIDE GATE - INSTALL AND REMOVE  BARB WIRE FENCE - REMOVE AND REPLACE	EA LF	1 154
101	TREE PROTECTION/CLEARING	AC	12
520.1	HYDROMULCHING	SY	7582
COSA 540	ROCK BERM	LF	152
COSA 540	EQUIPMENT STORAGE AREA	SY	197
COSA 540	WASHOUT PIT	SY	160
COSA 540.6	CONSTRUCTION ENTRANCE/EXIT	SY	380
COSA 540.9	SILT FENCE	LF	1346
COSA 200.1	8" FLEX BASE TEMP. DRIVE	SY	210
COSA 230.1	EXISTING DRIVE RESTORATION (8" FLEX BASE)	SY	260
824	2" WATER SERVICE LINE	LF	127
TXDOT 677	REMOVE 4" BROKEN SOLID YELLOW WITH TY II-AA	LF	410
TXDOT 677	REMOVE 4" BROKEN YELLOW STRIPE W TY I-C	LF	610
TXDOT 467	REMOVE DRAINAGE STRUCTURE W/ TY II SET	EA	2
TXDOT 677	REMOVE 4" SOLID WHITE STRIPE	LF	204
TXDOT 666	4" BROKEN SOLID YELLOW W/ TY II-AA	LF	410
TXDOT 666	4" BROKEN YELLOW STRIPE W/ TY I-C	LF	610
TXDOT 666	4" SOLID YELLOW STRIPE	LF	204
TXDOT 666	4" SOLID WHITE STRIPE	LF	204
TXDOT 160	8" TOP SOIL	SY	345
TXDOT 169	SOIL RETENTION BLANKETS (CL1)(TY B)	SY	345
TXDOT 110	EXCAVATION EMPLOYMENT	CY	530
TXDOT 132 TXDOT 340	EMBANKMENT  2" ACP TY-C	CY SY	237 680
TXDOT 340		SY	566
TXDOT 340	PRIME COAT	GAL.	113
TXDOT 316	ONE COARSE SURFACE TREATMENT	GAL.	57
TXDOT 247	6" FLEX BASE	SY	345
TXDOT 247	12" FLEX BASE	SY	793
TXDOT 260	6" LIME TREATED SUBGRADE	SY	850
	24" RCP (CLASS III)	LF	93
TXDOT 464	DRAINAGE STRUCTURE W/ TY II SET	EA	2
TXDOT 464	ROCK RUBBLE	SY	745
	NOOK NOBBEE		1
TXDOT 467	TRAFFIC CONTROL	LS	' ו
TXDOT 467 TXDOT 432	TRAFFIC CONTROL	LS LS	1
TXDOT 467 TXDOT 432 TXDOT 502 TXDOT 4027	TRAFFIC CONTROL		
TXDOT 467 TXDOT 432 TXDOT 502 TXDOT 4027 TXDOT 4027	TRAFFIC CONTROL PRIMARY ACCESS ESTABLISHMENT / MAINTENANCE	LS	1
TXDOT 467 TXDOT 432 TXDOT 502 TXDOT 4027 TXDOT 4027	TRAFFIC CONTROL PRIMARY ACCESS ESTABLISHMENT / MAINTENANCE PRIMARY ACCESS RESTORATION	LS LS	1
TXDOT 467 TXDOT 432 TXDOT 502 TXDOT 4027 TXDOT 4027 TXDOT 4027	TRAFFIC CONTROL PRIMARY ACCESS ESTABLISHMENT / MAINTENANCE PRIMARY ACCESS RESTORATION SECONDARY ACCESS ESTABLISHMENT / MAINTENANCE	LS LS LS	1 1
TXDOT 467 TXDOT 432 TXDOT 502 TXDOT 4027 TXDOT 4027 TXDOT 4027 TXDOT 4027	TRAFFIC CONTROL PRIMARY ACCESS ESTABLISHMENT / MAINTENANCE PRIMARY ACCESS RESTORATION SECONDARY ACCESS ESTABLISHMENT / MAINTENANCE SECONDARY ACCESS RESTORATION	LS LS LS	1 1 1

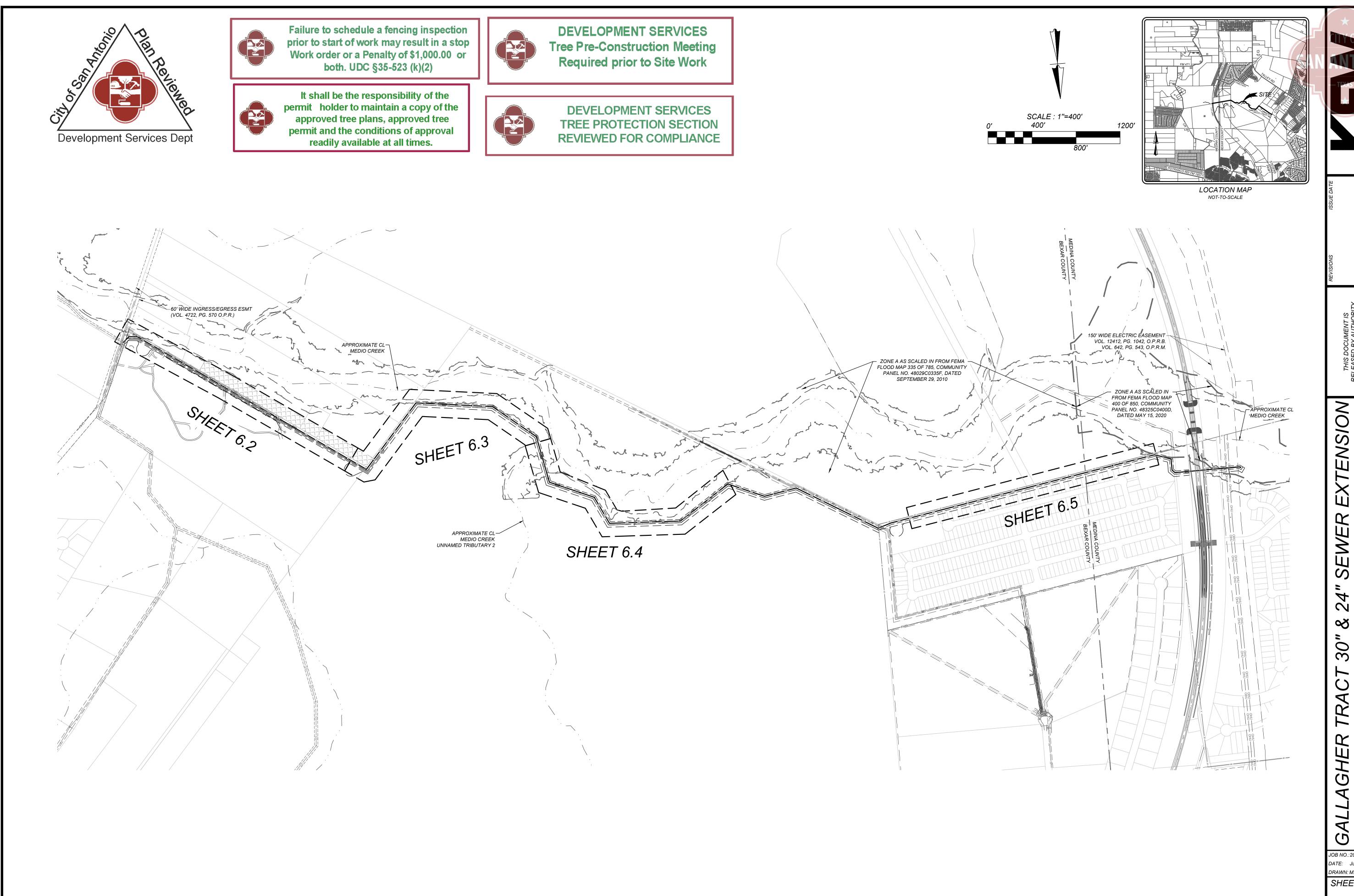
" FRP SN 72 PIPE AND TEE-BASE FIBERGLASS MANHOLES (INCLUDING SISER) HAVE BEEN PREORDERED AND WILL BE SUPPLIED TO CONTRACTOR. REFERENCE SPECIAL CONDITION 3 "MATERIAL LONG LEAD TIME" AND SPECIAL CONDITION 7 "FIBERGLASS REINFORCED PIP & TEE-BASE FIBERGLASS MANHOLES". IN THE CONTRACT DOCUMENTS PRICING OF MATERIAL AND FURTHER DETAILS.

> SEWER: MEDIO CREEK WATERSHED/SEWERSHED -MEDIO CREEK W.R.C.

DEVELOPER'S NAME: <u>DAPHNE DEVELOPMENT, LLC.</u> DEVELOPER'S ADDRESS: 1202 W. BITTERS RD, BLDG 1, SUITE 1200 CITY: SAN ANTONIO \_\_\_\_ STATE: <u>TEXAS</u> PHONE#: (210) 490-1798 TOTAL ACREAGE: N/A SAWS BLOCK MAP#: 060592, 062592, 064592, 066592, TOTAL EDU'S: N/A TOTAL LINEAR FOOTAGE OF PIPE: 7,466 L.F. ~ 30" FRP 4,320 L.F. ~ 24" PVC PIPE NUMBER OF LOTS: <u>N/A</u> SAWS JOB#: <u>21-4407</u>

GENERAL CONSTRUCTION PERMIT S.A.W.S. JOB# 21-4407

SHEET NUMBER:



ENGINEERS + SURVEYING
3421 Paesanos Pkwy, Suite 200, San Antonio, TX 782
Phone #: (210) 979-8444 • Fax #: (210) 979-8441
TBPE Firm #: 9513 • TBPLS Firm #: 10122300

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CONSTRUCTION

BEXAR COUNTY, TEXAS
PRESERVATION PLAN SHEET INDEX

JOB NO.:205-48-02 DATE: June 22, 2022

SHEET NUMBER:

6.0



	RIPARIAN HERITAGI	E INVENTORY TABLE	
TAG#	SPECIES	REMOVED	PRESERVED
4168	LO		32.8
4312	LO		30.2
4336	LO		24.1
SUB. TOTA	AL INCHES	N/A	87.1
тот	AL INCHES BY CATEG	ORY	87.1
HERITAG	E PRESERVATION PER	CENTAGE	100%
REQUIRED PRESERV	ATION PERCENTAGE		100%
HERITAGE MITIGATION	N/A		
HERITAGE MITIGATION	ON (INCHES) @ 3:1		N/A
FEMA HERITAGE INV	ENTORY TABLE		
	•	•	
TAG#	SPECIES	REMOVED	PRESERVED
TAG # 4175	SPECIES LO	REMOVED	PRESERVED 27.9
		REMOVED	
4175	LO	REMOVED	27.9
<b>4175</b> 4198	LO	REMOVED	27.9
4175 4198 4206	LO LO	REMOVED	27.9 33.6 26.6
4175 4198 4206 4210	LO LO LO	REMOVED	27.9 33.6 26.6 25
4175 4198 4206 4210 103316	LO LO LO ELM	REMOVED	27.9  33.6  26.6  25  32.65
4175 4198 4206 4210 103316 103321	LO LO LO LO LO LO LO ELM LO		27.9  33.6  26.6  25  32.65  48.0
4175 4198 4206 4210 103316 103321 SUB. TOTAL INCHES	LO LO LO ELM LO		27.9  33.6  26.6  25  32.65  48.0  193.8
4175 4198 4206 4210 103316 103321 SUB. TOTAL INCHES TOTAL INCHES BY CA	LO LO LO LO ELM LO ATEGORY		27.9  33.6  26.6  25  32.65  48.0  193.8  193.8
4175  4198  4206  4210  103316  103321  SUB. TOTAL INCHES  TOTAL INCHES BY CA	LO LO LO LO ELM LO ATEGORY ATION PERCENTAGE		27.9  33.6  26.6  25  32.65  48.0  193.8  193.8  100%

TREE STAND DELINEATION CALCULATIONS		•
TOTAL PROJECT AREA	16.58	ACRES
TOTAL EXISITING TREE CANOPY AREA	5.69	ACRES
SIGNIFICANT TREE CANOPY (25% MIN PRESERVATION)		
TOTAL CANOPY	129,837	SQ FT
PRESERVED	29,493	SQ FT
REMOVED	100,344	SQ FT
PERCENT PRESERVED	22.72%	
MITIGATION REQUIRED	2.28%	
RIPARIAN BUFFER TREE CANOPY (80% MIN PRESERVATION)		
TOTAL CANOPY	62,119	SQ FT
PRESERVED	24,700	SQ FT
ADDITIONAL PRESERVED	26,608	SQ FT
REMOVED	37,419	SQ FT
PERCENT PRESERVED	82.60%	
MITIGATION REQUIRED	-2.60%	
FEMA TREE CANOPY (80% MIN PRESERVATION)		
TOTAL CANOPY	55,739	SQ FT
PRESERVED	37,106	SQ FT
ADDITIONAL PRESERVED	11,200	SQ FT
REMOVED	18,633	SQ FT
PERCENT PRESERVED	86.66%	
MITIGATION REQUIRED	-6.66%	
MITIGATION	SQ FT	# TREES
SIGNIFICANT TREE CANOPY (SF CANOPY / 787.5 x 1.5" TREE)	2966.25	5.65
HERITAGE TREE (27.34" / 1.5" TREE)		18.15
PAYMENT TO THE TREE MITIGATION FUND		\$4,760.00
RIPARIAN BUFFER TREE CANOPY (SF CANOPY / 787.5 x 1.5" TREE)	0.00	0.00
PAYMENT TO THE TREE MITIGATION FUND		\$0.00
FEMA TREE CANOPY (SF CANOPY / 787.5 x 1.5" TREE)	0.00	0.00
PAYMENT TO THE TREE MITIGATION FUND		\$0.00

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ERVATION PLAN TABLES

AGHER TRACT 30" & 24" SEWER EXTENSION
BEXAR COUNTY, TEXAS

JOB NO.:205-48-02
DATE: July 11, 2022
DRAWN: M.W. CHECKED: A.C.
SHEET NUMBER: